

the rainfall area reached only to Valdivia. The depression of the 7th-12th, the most important of the month, appeared in latitude  $40^{\circ}$  and recurved toward the northwest; it was accompanied by unsettled weather and rain from Chiloe to Coquimbo. The depression off Isla Mocha on the 17th caused fog in the central region and light rain in the southern region.

Periods of fine weather, cold wave, and frost accompanied the principal anticyclones charted during the

following periods: 12th-16th, 18th-22d, 23d-25th, and 27th-31st. The first three formed in the region of Chiloe and advanced toward northern Argentina, while the fourth moved from Juan Fernandez toward central Chile and Argentina. The severest cold wave occurred at the end of the month—minimum temperature  $-11^{\circ}$  F. at Caracoles, in the Province of Antofagasta.

Total monthly precipitation: Santiago, 1.81 inches; Valdivia, 17.84 inches.—Translated by W. W. R.

## BIBLIOGRAPHY

C. FITZHUGH TALMAN, in Charge of Library

### RECENT ADDITIONS

The following have been selected from among the titles of books recently received as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies:

**Abbot, C. G.**

Smithsonian solar radiation researches. Leipzig. 1927. p. 344-383. figs. 22 cm. (Sonderdr.: Gerlands Beiträge zur Geophysik. Bd. 16, H. 4.)

**Anderson, Clifford N.**

Correlation of long wave transatlantic radio transmission with other factors affected by solar activity. 51 p. figs. 23 cm. (Bell tel. lab., inc. Repr. B-303. Apr., 1928.) (Transatlantic radio transmission and solar activity.)

**Bergmark, D. R.**

Relative humidity and forest fires. p. 238-246. 23 cm. [Trans. Ill. state acad. sci. 20th annual meeting. Joliet, Ill. Apr. 29-30, 1927. v. 20. 1928.]

**Besson, Louis.**

L'Actinométrie au point de vue climatologique. Paris. n. d. 22 p. illus. 24 $\frac{1}{2}$  cm. (Extr.: Ann. de l'Inst. d'hydrol. et de clim. T. 5, no 2, avril-juin 1927.)

Les stations d'altitude françaises. Paris. n. d. 20 p. 23 $\frac{1}{2}$  cm. (Annales d'hygiène pub., indust. et soc. 6e année. no. 6. juin 1928.)

**Bilancini, R.**

Sopra una caratteristica geometrica dei diagrammi anemologici di frequenza. Pisa. 1928. 16 p. figs. 24 $\frac{1}{2}$  cm. (L'Aerotecnica. Giorn. ed atti dell'ass. ital. di aerotec. Anno 7, no. 4, 1928. A. 6.)

Sul regime anemologico del Golfo della Spezia. Roma. 1928. p. 244-249. 29 cm. (Rendi. R. Accad. naz. dei Lincei. Cl. sci. fis., mat. e nat. v. 7, ser. 6a, 1° sem., fasc. 3. Roma, feb., 1928.)

**Carpenter, Thorne M., & Fox, Edward L.**

Absence of stratification and rapidity of mixing of carbon dioxide in air samples. p. 379-381. 22 $\frac{1}{2}$  cm. (Nutrition lab., Carnegie inst. of Wash., Boston.) Répr.: Journ. biol. chem., v. 73, no. 2, June, 1927.)

**Chemulpo (Korea) Meteorological observatory.**

Air temperature in Tydsen. (Korea.) Zinsen. 1928. 2,343 p. charts. 30 $\frac{1}{2}$  cm.

**Claude, Georges.**

Air liquide, oxygène, azote, gaz rares. éd. 2. Paris. 1926. 424 p. illus. 25 $\frac{1}{2}$  cm.

**Duncan, Richard.**

Air navigation and meteorology . . . New York. [c1928.] 136 p. figs. 18 $\frac{1}{2}$  cm.

**Eredia, Filippo.**

I climogrammi d'Italia. Roma. 1928. p. 332-337. diagr. 31 cm. (Estr.: Atti Pont. accad. sci. nuovi Lincei. Anno 81. Sess. V del 15 Apr. 1928.)

La determinazione della forza ascensionale dei palloni piloti.

Pisa. 1928. Sp. illus. 24 $\frac{1}{2}$  cm. (Estr.: L'Aerotecnica. Giorn. ed atti dell'Ass. Ital. de aerotec. Anno 7, N. 4. 1928. A. 6.)

Distribuzione dell'umidità nell'atmosfera. Roma. 1928. 9 p. 24 $\frac{1}{2}$  cm. (Estr.: Riv. aeronautica. Anno 4, n. 3. Marzo 1928.)

**Goldthwait, J. W.**

Gathering of floods in the Connecticut river system. New York. n. d. p. 428-445. illus. plate (fold.) 25 $\frac{1}{2}$  cm. (Repr.: Geogr. rev., v. 18, no. 3, July, 1928.)

**Leighly, John B.**

Graphic studies in climatology. 2. Polar form of diagram in the plotting of the annual climatic cycle. Berkeley. 1928. p. 387-407. figs. 27 $\frac{1}{2}$  cm. (Univ. Cal. pub. geogr. v. 2, no. 13, July 18, 1928.)

**Lejay, Pierre.**

Les perturbations orageuses du champ électrique et leur propagation à grande distance. Une application de l'électromètre amplificateur. Paris. n. d. 66 p. figs. 25 $\frac{1}{2}$  cm.

**Maltzew, W. A.**

Leuchtende Nachtwolken am 8-9 August 1925. p. 153-172. illus. plate. 23 cm. [Author, title and text in Russian. German abstract.]

**Martinozzi, L.**

Su un nuovo modello di igrometro a condensazione. Roma. 1928. p. 389-393. fig. 28 $\frac{1}{2}$  cm. (Rendi. R. Accad. naz. dei Lincei. Cl. sci. fis., mat. e nat. Estr. v. 7, ser. 6\*, 1° sem., fasc. 5. Roma, marzo, 1928.)

**Möller, Lotte.**

Alfred Merz, hydrographische Untersuchungen in Bosporus und Dardanellen. Berlin. [1928.] 284 p. figs. plates (fold.) 27 cm. (Veröffentl. Inst. für Meereskunde. Univ. Berlin. Neue Folge. A. Geogr.-naturwiss. Reihe. H. 18.)

**Sifontes, Ernesto.**

La lluvia en Venezuela años de 1925 y 1926. Caracas. 1928. 16 p. 23 $\frac{1}{2}$  cm.

**Yancey, Lewis Alonzo.**

Aerial navigation and meteorology. [New York.] 1928. iii, 68 p. diagrs. 19 $\frac{1}{2}$  cm.